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ABSTRACT

A model of administrator development was tested in the 21 colleges, graduate and professional schools of a major state university system. Data were gathered from 494 administrators. Administrator development was measured in three ways: (1) individual rate of advancement, (2) perceptions of mobility and "success," and (3) perceptions of personal growth and development. Fifteen variables were hypothesized to predict administrator development, and five predictors emerged. Across the population of administrators, rate of advancement was higher among administrators who: (1) experience formal performance appraisals, (2) work in departments where rewards depend on performance, (3) lack comprehensive personal development plans, (4) report individual/organizational work-goal integration, and (5) are relatively young. Three additional variables were found to be related to rate of advancement of either junior, mid-level, or senior administrators when they were analyzed as subsamples. (SW)

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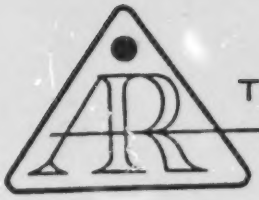

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CAREER DEVELOPMENT
OF POST-SECONDARY ADMINISTRATORS

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ABSTRACT

This paper reports the test of a model of administrator development. The study was conducted in the 21 colleges, graduate and professional schools of a major state university system. Data were gathered from 494 members of the administrative cadre of these units. Administrator development was measured in three ways: (1) individual rate of advancement, (2) perceptions of mobility and "success," and (3) perceptions of personal "growth" and development. Fifteen variables hypothesized to predict administrator development were measured. These independent variables were regressed against the dependent variables: rate of advancement, etc. Five predictors emerged. Across the population of administrators, rate of advancement is higher among administrators who:

1. Experience formal performance appraisals
2. Work in departments where rewards depend upon performance
3. Lack comprehensive personal development plans
4. Report individual/organizational work goal integration
5. Are relatively young

Three additional variables were found to be related to rate of advancement of either junior, mid-level, or senior administrators analyzed as subsamples.

CAREER DEVELOPMENT OF POST-SECONDARY ADMINISTRATORS

> "The topic of career development is of growing concern to organisations, both large and small, in the business and the government sector of society. The reasons for this concern are several: (1) The growth and productivity of organisations is more than ever dependent upon the effectiveness of human performance, both at the worker and manager level; (2) As countries become more advanced economically and technologically, they are more vulnerable to under-motivated workers and managers; (3) Social values are shifting away from viewing work as the most important thing in life, toward a balanced view of self-development, family development, and career development; therefore if organisations cannot create opportunities for career fulfilment, even at the worker level, they will have an increasing number of unmotivated and ultimately unproductive workers. (Schein, 1976)"

> "For many organizations, the current push for career development, especially for women and minority candidates, comes in an economic period when career growth is hardest to provide: a period of corporate slow-down or retrenchment. When many new management positions are opening up in an organization, career opportunities abound; when they dry up, career advancement requires more careful planning. How can we make the most of these declining opportunities? (Hall and Hall, 1976)"

In these quotations, two leading American experts on career development define a major issue for post-secondary institutions in the next decade. As Schein argues, career development is a topic of increasing concern. As Hall and Hall attest, this concern is rising at a most inopportune time for post-secondary institutions - - during a time of stasis, retrenchment, and restricted mobility.

The lack of empirical research into the career development of post-secondary administrators compounds the problem faced by college and university managers. Little is known about the personal development and/or mobility of

academic administrators. Folk wisdom abounds, but although models of the developmental process have been proffered (e.g., Bare, 1977), none has been tested empirically. Sound research must precede the design of truly effective career development programs.

This paper reports an empirical study of the developmental process. The study was conducted in the 21 colleges, graduate and professional schools of a major state university system.

RESEARCH PROCEDURE

MODEL

The model which guided the research is presented in Figure 1. The variables included in the model were drawn from the literature (c.f., Pinto and Gutteridge, 1975) or identified by the process of oomphaloskepsis.

Figure 1 about here

The model suggests that individual development is the result of a complex interaction of:

1. Personal characteristics
2. Organizational location
3. Job characteristics
4. Supervisory behavior
5. Performance appraisal processes
6. The self-development process
7. Organizational supports

Variables pertinent to ongoing staff development activities at the University were selected from these panels and operationalized in a questionnaire. The questionnaire was mailed to all exempt staff in the University system.

RESEARCH HYPOTHESES

It was hypothesized that the administrators' rate of advancement would be positively correlated with:

1. Education
2. Being male

3. Job responsibility
4. Supervisory delegation and on-the-job training
5. Formal performance evaluation
6. Performance-contingent rewards
7. Mutual and supportive supervisor relationship
8. Appraisal discussions that focus upon organizational problems
9. Individual/organizational work goal integration
10. Comprehensive personal development planning
11. Definite personal improvement goals

It was hypothesized that rate of advancement would be negatively associated with:

1. Age
2. Entry level
3. Length of service
4. Current level in the organization

RESEARCH POPULATION

Questionnaires were circulated to the entire administrative cadre of the University system, approximately 800 persons. 494 responses were received, a response rate of 62%.

The population includes no clerical or secretarial personnel. It includes all exempt personnel, including all faculty serving in administrative positions.

After the data were analyzed across the entire population, separate analyses were run in three subsamples of the population called "junior," "mid-level," and "senior" administrators on subsequent pages. These subsamples were defined as follows:

1. Junior administrators: all respondents in University exempt salary ranges 10 to 20. Salary range 20 is the highest salary range occupied by an "executive assistant."
2. Senior administrators: all respondents in University exempt salary ranges 29 to 42. Salary range 29 is the lowest salary range occupied by a University "director," that is, a department-head responsible for a major functional unit, usually reporting to a Dean or Vice-President.
3. Mid-level administrators: all respondents in salary ranges 21 to 28; essentially, everyone in-between the executive and assistant categories. This sample includes personnel with the title "manager" as well as most technical and scientific professionals (accountants, programmers, etc.).

DATA ANALYSES

Factor Analysis

To verify that the questionnaire items clustered into homogeneous sets or scales as expected, the administrators' responses were factor analyzed. The type PA1 procedure of the SPSS FACTOR computer program was employed with VARIMAX rotation of the solution (Nie, et. al., 1975). The results of the factor analysis are presented in the appendix. The appendix lists the individual questions which comprise each factor and the factor loading of each item.

Score Computation

Each statement in the survey is scored on a five-point scale: "Strongly disagree" = 1, "Disagree" = 2, "Neutral" = 3, "Agree" = 4, and "Stongly agree" = 5. To quantify each factor, each administrator's responses to the statements which comprise that factor were summed, producing a set of individual scores - - one for each factor. These scores plus demographic, personal and organizational data provided by each respondent are the independent variables in the study.

Reliability Analysis

An analysis was performed to determine the measurement reliability of each scale. This analysis employed the RELIABILITY procedure of the SPSS computer program. This procedure calculates Alpha coefficients for each scale. Chronbach's Alpha coefficient indicates the homogeneity of the items in the scale. The resulting Alpha values are satisfactory, and are indicated in the appendix.

Dependent Variable

The principal dependent variable in the research, administrator rate of advancement, was computed as follows:

$$\frac{\text{(current position level* - position level at hire)}}{\text{Years of service}}$$

Regression Analyses

Regression analysis was used to relate the independent variables to rate of advancement both across the entire population of administrators and in selected subsamples. These analyses were performed using the SPSS REGRESSION procedure. Variables were entered into the regression equation in unconstrained, stepwise fashion. No variable was allowed to enter the equation unless an F-test of the regression coefficient proved significant at the 95% confidence level (F=1.65). All regressions presented herein are significant at the 95% confidence level or better.

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* Hay salary category, ranging from level 10 to level 42.

FINDINGS

The simple product-moment correlations of the 15 independent variables with rate of advancement are shown on Figure 1 in parentheses. As illustrated, the strongest single correlate with advancement is entry level. The lower the entry level, the greater the rate of advancement. This finding may simply illustrate the fact that more "openings" occur at the bottom of a pyrmidal organization than toward the top.

Although the correlations presented in Figure 1 constitute a test of the model, we are more interested in the results of the regression analysis. The regressions tell us whether the variables make independent contributions to variance in advancement.

However, before examining the regression list, please note the intercorrelations between rate of advancement and the alternative dependent variables listed on Figure 1: perceived mobility, perceived personal development, and time in grade. The significant correlations help establish the convergent validity of the four outcome measurements. However, the correlations are weak. For example, rate of advancement correlates only r=.32 with perceived mobility. While this weak correlation may reflect measurement error, it may also indicate that administrators' perceptions of their advancement differ markedly from reality. To the extent their behavior is motivated by their perceptions rather than reality, the perceptual indices represent a legitimate alternative worthy of study.

OVERALL REGRESSION ANALYSIS

Across the population of administrators, five variables control portions of the variance in rate of advancement (Figure 2). Highest rate of advancement is found among individuals who:

1. Experience formal performance appraisal
2. Work in departments where rewards depend upon performance
3. Lack comprehensive personal development plans
4. Report individual/organizational work goal integration
5. Are relatively young.

Figure 2 about here

These results must be interpreted with caution. For example, it may be that formal performance appraisal aids administrator development or documents achievement, leading to more rapid advancement. Conversely, perhaps supervisors who have many promotions to dispense simply resort to formal evaluation to rationalize the process.

Similarly, perhaps the perception that performance will lead to rewards motivates performance, and ultimate advancement. Alternatively, perhaps employees who are promoted merely report higher levels of "payoff" as a consequence.

The finding that advancement is negatively correlated with personal development planning is unexpected. One possible interpretation is that administrators undertake intensive career planning because of lack of advancement -- a compensatory model. An alternative explanation is that administrators who emphasize career development, as opposed to work accomplishment, may impede their mobility.

The finding that advancement relates to individual/organizational work goal integration is likewise open to alternative interpretations. It may be that helping meet important departmental objectives leads to more rapid advancement, or it may be that advancement leads to roles which emphasize departmental goal accomplishment.

Age is the only demographic correlate of advancement in this population of administrators. As hypothesized, rate of advancement is higher among younger administrators.

PERCEIVED MOBILITY AND PERSONAL DEVELOPMENT AS DEPENDENT VARIABLES

The same set of independent variables was regressed against the index which tapped administrators' perception of their rate of advancement (appendix). As shown in Figure 3, four variables explain 41% of the variance in perceived mobility. Administrators who perceive themselves as mobile:

1. Perceive their jobs to be complex and responsible
2. Work in departments where rewards depend upon performance
3. Are actually advancing rapidly
4. Have comprehensive personal development plans

It is interesting to note that job responsibility and working in a department where performance is rewarded enter the regression before actual rate of advancement.

Figure 3 about here

A similar result occurs when the index which tapped administrators' perceptions of their personal development was used as the dependent variable (Appendix). As shown in Figure 4, job responsibility and having a comprehensive personal development plan enter the regression before actual rate of advancement.

Figure 4 about here

These findings suggest that an index composed of several components might make a useful dependent variable in future studies of administrator "development". One might employ an index composed of perceptions of increased skill, job responsibility, and actual salary progression in equal parts. Such an index might respond more strongly to interpersonal process variables than the "hard" wage and salary data used to measure "development" in this study.

MODERATOR ANALYSES

To determine the correlates of advancement unique to different levels in the organization, regressions were run in subsamples of the total population composed only of junior, mid-level, or senior administrators.

Lower Levels

In the lower ranges (Figure 5), two variables control increments of advancement rate:

1. Lack of mutual relationships with the supervisor
2. Sex

In a statistical sense, rapid advancement for junior administrators is associated exclusively with being a female and having relatively formal relationships with one's supervisor.

Figure 5 about here

These findings are open to many interpretations. Unfortunately, the exact distribution of job types among the respondents is not available. Women do not predominate in these job classifications: the number of male and female respondents is almost equal. The sample does not include any secretaries or clerical staff. However, the sample does include a substantial number of female executive assistants, who enjoy the benefits of a logical career progression, hierarchical job classification, and who may enjoy the benefits of an informal "fast track" by virtue of their executive associations.

More interesting, perhaps, are the number of variables which relate to career advancement among middle- and senior-level administrators in the population (Figures 6 and 7) which do not appear in the junior administrator regression equation. Even if differences in education, job responsibility, personal development planning etc., fail to "predict" rate of advancement for junior administrators, one would expect some of the variables which correlate with advancement of middle administrators (e.g., formal assessment of performance) to correlate with advancement for junior administrators as well. Of course, finding "non-relationships" in the junior administrator group does not mean the measured variables are unimportant. The junior-administrator sample is the most heterogeneous of the three; thus, one would expect the number of correlates of advancement to be fewer and weaker in this sample. Further subgrouping within the sample, say by job type, might produce more detailed profiles of advancement correlates within job classes. In general, however, only sex and supervisory relationships relate to advancement rate across the total sample of junior administrators.

Mid-Level Administrators

For mid-level administrators, four variables contribute independently to the regression (Figure 5). Rapidly advancing mid-level administrators tend to:

1. Be younger
2. Have formal performance appraisals
3. Lack personal development plans
4. Report more individual/organizational work goal integration

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Figure 6 about here

The finding that rate of advancement and age are negatively related suggests that advancement slows down with age in the mid levels. As noted earlier, formal documentation of appraisal and individual/organizational goal integration correlate with rate of advancement across the population generally. The negative relationship between personal development planning and advancement also is characteristic of the population of administrators from which this sample was drawn.

Senior-level administrators

Four variables contribute to the regression equation in the sample of executives (Figure 7). Rapidly advancing senior administrators report having:

1. Appraisal discussions which focus upon organizational problems
2. Supervisors who fail to practice delegation and on-the-job training
3. Definite personal improvement goals
4. High-levels of individual/organizational work goal integration.

The first three of these variables appear only in this regression equation.

Figure 7 about here

It may be that discussing and solving organizational problems contributes to promotion at this level in the organization. On the other hand, administrators may develop an organizational problem focus from the experience of continued advancement at the executive level.

Similarly, having definite personal improvement goals may contribute to advancement by enabling senior administrators to improve weaknesses and prepare for more demanding roles. On the other hand, advancement may simply stimulate executives to identify improvements needed to meet increased responsibility.

The "surprise" in this equation is the finding that rapid advancement is negatively associated with supervisory delegation and training. It may be that supervisors of administrators delegate and train subordinates primarily to improve perceived weaknesses. Thus, subordinates perceived as promotable by their superior would not receive the amount of delegation and training devoted to their less-effective peers. Many other post hoc explanations of the finding are possible, however. For example, perhaps delegation is simply less common in units where mobility is high and achievers can be assigned more responsible roles.

CONCLUSIONS

The study confirmed five of the 15 research hypotheses. The following variables were found to be significantly related to rate of advancement across the population of administrators:

1. Formal documentation of appraisal
2. Performance-contingent rewards
3. Individual/organizational work goal integration
4. Age
5. Entry level

An additional three of the 15 research variables were significantly related to advancement of junior-, mid-level, or senior administrators taken as subgroups:

1. Sex
2. Discussion of organizational problems
3. Definite personal improvement goals

Four variables were related to advancement with a sign reversed from that hypothesized:

1. Comprehensive personal development planning
2. Present level in the organization
3. Mutual relationships with supervisor
4. Supervisory delegation and training

Three variables were unrelated to advancement across the population and in the subgroups:

1. Education

2. Length of service

3. Job responsibility

In general, the research has begun to validate the model presented in Figure 1 by demonstrating that a number of the variables are independently associated with the advancement of post-secondary administrators. It also demonstrated the salience of different variables depending upon the level of administrators in the organization.

Although the cross-sectional research design obscures causality, it seems clear that several variables dear to the hearts of academic managers are central to the mobility process within the population studied. For example, the study demonstrated a pervasive link between both formal performance appraisal and performance-contingent rewards and rate of administrator advancement. Although this finding is open to interpretation, one cannot assert that links between performance evaluation, reward contingencies, and advancement are entirely mythical at this university. Since post-secondary managers are investing heavily in the installation of performance assessment and reward systems, and since employees would like to believe that advancement is not entirely an arbitrary or random process, such findings have considerable practical as well as theoretical value.

The research also demonstrated a useful methodology. At the same time it has exposed a weakness that must be dealt with in future studies: the "dependent variable" problem. Rate of advancement was used as the dependent variable in this study because it is a "hard" (e.g., not-perceptual) measure. It also has considerable intrinsic interest to administrators and academic managers. However, advancement is an imperfect surrogate for administrator growth and development. Rate of advancement is largely a function of <u>organizational</u> variability; for example, differential turnover. Administrators may acquire technical skills,

grow personally, and perceive themselves "successful" without advancing rapidly through the wage and salary structure. Future research into administrator development should attempt to measure not just mobility, but these more subtle aspects of "development" as well. Perhaps, as suggested earlier, some form of index which combines soft and hard data can be developed for use in future research.

REFERENCES

1. Bare, A.C., "Individual Development Planning in Academic Settings," Journal of the College and University Personnel Association, 28, 4, 1977.

2. Hall, D.T., and Hall, F.S., "What's New in Career Management?" Organizational Dynamics, 5, 1, 1976.

3. Nie, N.H., et.al., SPSS: Statistical Package for the Social Sciences. McGraw-Hill, 1975.

4. Pinto, P.R., and Gutteridge, T.G., Career Planning and Career Management: Perspectives of the Individual and the Organization, An Annotated Research Bibliography. University of Minnesota: Industrial Relations Center, 1975.

5. Schein, E.H., "Career Development: Theoretical and Practical Issues for Organizations," In Kubr, M. (ed.), Career Planning and Development: Management Development Series No. 12. International Labor Office: Geneva, 1976.

FOOTNOTE

The author is indebted to Connie Lamela and Patricia Wilder for their assistance in conducting the research and reporting the results. Todd White and Michaelene George gave valued counsel.

PERSONAL CHARACTERISTICS

Age (-.08)
Sex (.00)
Education (-.05)
Risk taking
Locus of control
Career stage
Values, life plan

ORGANIZATIONAL SITUS

Entry level (-.39***)
Length of service (.09)
Level (.14*)
Function
Line vs. staff

JOB CHARACTERISTICS

Complexity
Variety
Autonomy
Control
Feedback
Responsibility (.04)

SUPERVISORY BEHAVIOR

Coaching/Modeling
Delegation and OJT (.04)
Job design, enrichment
Encouragement of training
Performance-contingent rewards (.18**)

PERFORMANCE APPRAISAL PROCESS

Formal performance appraisal (.19**)
Frequent, timely
Mutual and supportive (.06)
Non-judgemental assessment
Focus on org. problems (.12)
Work/org. goal integration (.10)

SELF-DEVELOPMENT PROCESS

Adequacy of assessment
Comprehensive development plan (-.06)
Definite improvement goals (.12)
Realism
Follow-up

ORGANIZATIONAL SUPPORTS

Career planning workshops
Job family design, ladders
Succession planning
Fast tracks, rotation
In-service training
Tuition reimbursement
Sabbaticals, retraining incentives
Flexible wage structure
Released Time
Flexible scheduling
Job posting
Career counseling, mentoring
Career information centers
Supervisory role training, rewards
New employee orientation
Affirmative Action program
Assessment centers
Early retirement incentives

ALTERNATIVE OUTCOME MEASURES

Acquired skills
Perceived growth (.22**)
Perceived "success" (.32***)
Time in grade (-.20**)
Rate of advancement

Figure 1. Variables Hypothesized to Influence Administrator "Development"

Coefficients = r with actual rate of advancement over population of 494

* p = .05
** p = .01
*** p = .001

Figure 2

Correlates Of Rate Of Advancement Across Population Of Administrators

Variables	Multiple R	R Square	R^2 Change	Simple r	Partial r
Formal Performance Appraisal	.19	.03	.03	.19	
Performance-contingent rewards	.23	.05	.01	.18	.13
Comprehensive Personal Development Plan	.26	.07	.01	-.06	-.13
Individual/Organizational Goal Integration	.29	.08	.01	.10	.12
Age	.31	.09	.01	-.08	-.12

Figure 3

Correlates Of Perceived Personal Mobility

Variables	Multiple R	R Square	R^2 Change	Simple r	Partial r
Job Responsibility	.47	.22	.22	.47	
Performance-contingent rewards	.57	.33	.10	.42	.37
Actual Rate Of Advancement	.62	.39	.06	.32	.26
Comprehensive Personal Development Plan	.64	.41	.02	.32	.16

Figure 4

Correlates Of Perceived Personal Development

Variables	Multiple R	R Square	R^2 Change	Simple r	Partial r
Job Responsibility	.57	.33	.33	.57	
Comprehensive Personal Development Plan	.63	.39	.06	.47	.31
Actual Rate Of Advancement	.66	.44	.14	.22	.16
Education	.67	.45	.01	-.08	-.14

Figure 5

Correlates Of Rate Of Advancement: Junior Administrators

Variables	Multiple R	R Square	R^2 Change	Simple r	Partial r
Mutual Relationship With Supervisor	.28	.08	.08	-.28	
Sex	.37	.14	.06	-.25	-.26

Figure 6

Correlates Of Rate Of Advancement: Mid-Level Administrators

Variables	Multiple R	R Square	R^2 Change	Simple r	Partial r
Age	.23	.05	.05	-.23	
Formal Performance Appraisal	.35	.12	.06	.22	.27
Comprehensive Personal Development Plan	.38	.14	.02	-.11	-.17
Individual/Organizational Goal Integration	.40	.16	.01	.03	.14

Figure 7

Correlates Of Rate Of Advancement: Senior Administrators

Variables	Multiple R	R Square	R^2 Change	Simple r	Partial r
Discussion Of Organizational Problems	.42	.17	.17	.42	
Supervisory Delegation And OJT	.55	.30	.12	-.16	-.39
Definite Personal Improvement Goals	.61	.37	.06	.35	.30
Individual/Organizational Goal Integration	.65	.42	.05	.30	.29

APPENDIX

I. MUTUAL RELATIONSHIP WITH SUPERVISOR (Alpha = .93)

	Factor Loading
My supervisor is easy to talk to.	.86
My supervisor is a good listener.	.84
I find our discussions to be a satisfying experience.	.83
Our discussions improve my relationship with my supervisor	.81
Overall, I believe our discussions are beneficial to me personally.	.79
During our discussions, I have the opportunity to state "my side" of the issues.	.69
My supervisor and I have frequent discussions	.67
My supervisor asks my opinion about particular job problems.	.61

II. FORMAL PERFORMANCE APPRAISAL (Alpha=.93)

	Factor Loading
My performance appraisal includes a written plan for my development.	.86
My supervisor prepares a written evaluation of my accomplishments against my work plan.	.85
My supervisor prepares a written evaluation of progress against my development plan.	.84
My performance appraisal includes actions to be taken by my supervisor.	.83
My performance appraisal documents my accomplishments	.81
I receive a written copy of my performance appraisal.	.73

III. COMPREHENSIVE PERSONAL DEVELOPMENT PLAN (Alpha = .84)

My personal development plan includes off-the-job learning such as workshops, conferences, and visits.	.72
I've attended a workshop in career planning.	.67
My development plan is based upon an assessment of performance.	.66
My personal development plan is designed to prepare me for future roles.	.65
My personal development plan includes specific on-the job learning opportunities.	.63
I have been trained in the methods of self-assessment, personal development planning, and self-directed learning.	.61

IV. DEFINITE PERSONAL IMPROVEMENT GOALS (Alpha = .85)

	Factor Loading
My supervisor and I have agreed to a definite plan to improve my performance.	.68
My supervisor and I have agreed to a definite plan for my training and personal development.	.66
As a result of our discussions, I have made a commitment to accomplish specific goals.	.60

V. JOB RESPONSIBILITY (Alpha = .84)

My work involves doing a job from beginning to end (e.e., the whole job).	.70
My job requires me to solve complex problems.	.64
My job gives me the opportunity to be useful.	.60
My job lets me participate in determining methods, procedures and goals.	.58
My job makes me responsible for clearly defined results.	.52
I get a feeling of worthwhile accomplishment from my job.	.51
My job gives me lots of autonomy and independence.	.51

VI. SUPERVISORY DELEGATION AND OJT (Alpha = .81)

	Factor Loading
My supervisor frequently delegates his/her work to me.	.69
My supervisor has me swap responsibilities with others.	.66
My supervisor encourages me to do things that aren't strictly within my job description.	.65
My supervisor gives me a wide variety of assignments.	.56

VII. DISCUSSION OF ORGANIZATIONAL PROBLEMS (Alpha = .81)

We discuss the problems of others in my work group.	.66
We discuss the performance of the work group as a whole.	.60
We discuss University problems.	.52

VIII. PERFORMANCE-CONTINGENT REWARDS (Alpha=.58)

In my department, salary increases are based upon performance.	.70
In my department, promotions always go to the best performers.	.68
My pay is equitable for the work I do.	.52

IX. INDIVIDUAL/ORGANIZATIONAL GOAL INTEGRATION (Alpha = .67)

My work goals relate to specific college objectives.	.80
My work goals relate to specific department goals.	.74

X. PERCEIVED PERSONAL DEVELOPMENT (Alpha = .83)

	Factor Loading
Working helps me grow as a person.	.79
In my work, I learn skills that are valuable off the job as well.	.76
By working, I discover personal strengths I did not even know I had.	.73
I'm learning to handle increased responsibility.	.73
By working, I'm developing leadership and interpersonal skills.	.71
By working, I'm really developing my talents.	.70
By working, I'm gaining valuable job-related skills.	.70
Working makes me more creative.	.66
I'm not learning anything worthwhile on my job.	-.53
By working, I'm gaining useful technical knowledge.	.52

XI. PERCEIVED MOBILITY (Alpha = .56)

I'm not satisfied with my rate of advancement.	-.76
I'm moving ahead rapidly in the organization.	.48
I'd rate my career so far as highly successful.	.38